

What is claimed is:

1. A bendable, multiple wall air gap pipe apparatus comprising:
 - a rigid tube defining a rigid first wall;
 - at least one elongated profile member defining a flexible second wall;
 - said first and second walls having unequal diameters, one being disposed within the other;
 - said air gap pipe being bendable on conventional single wall tube bending apparatus.

2. Apparatus as in claim 1 wherein said flexible second wall is disposed within said first wall.
3. Apparatus as in claim 2 wherein said pipe has at least one bend of at least five degrees therein.
4. Apparatus as in claim 2 wherein said flexible second wall comprises at least two elongated profile members.
5. Apparatus as in claim 4 wherein said elongated profile members comprise elongated strips with overlapping edges.
6. Apparatus as in claim 5 wherein said edges are intertwined in multiple planes.
7. Apparatus as in claim 6 including packing members between intertwined edges.
8. Apparatus as in claim 5 further including at least three elongated profile strips with respective overlapping edges.
9. Apparatus as in claim 8 including at least seven elongated profile strips with respective overlapping edges.

10. Apparatus as in claim 5 wherein said edges are interlocked.
11. Apparatus as in claim 2 wherein said flexible second wall has an end flared outwardly toward an end of said first wall.
12. Apparatus as in claim 2 wherein said first rigid wall has an end constricted inwardly toward an end of said flexible wall.
13. Apparatus as in claim 2 wherein respective ends of said first and second walls are tapered toward one another.
14. Apparatus as in claim 2 further including a ring interconnecting respective ends of said first and second walls.
15. Apparatus as in claim 14 wherein said ring has a tapered surface.
16. Apparatus as in claim 2 wherein said flexible second wall includes a radially extending feature directed outwardly into engagement with said first wall.

17. Apparatus as in claim 2 wherein said first wall includes a feature directed radially inwardly to engagement with said flexible second wall.
18. Apparatus as in claim 2 wherein said first wall includes a feature directed radially inwardly toward said flexible second wall and said flexible second wall includes a feature directed radially outward toward said first wall, said respective features engaging to center said flexible second wall within said first wall.
19. Apparatus as in claim 2 further including metallic positioning members disposed between and separating said first wall from said flexible second wall and centering said flexible second wall within said first wall.
20. Apparatus as in claim 2 further including ceramic positioning members disposed between and separating said first wall from said flexible second wall and centering said flexible second wall within said first wall.
21. Apparatus as in claim 1 further including a positioning member disposed between said walls.

22. Apparatus as in claim 21 wherein said flexible second wall includes radially extending projections, said positioning member being disposed between said projections.
23. Apparatus as in claim 21 wherein said first rigid wall includes radially extending projections, said positioning member being disposed between said projections.
24. Apparatus as in claim 21 wherein each of said first rigid wall and said flexible second wall include radially extending projections projecting respectively toward each other in cooperating sets, and said positioning member being disposed between sets of said projections.
25. Apparatus as in claim 21 wherein said flexible second wall is flared outwardly to said rigid first wall and said positioning is disposed between said walls proximate said flexible second wall outward flare.
26. Apparatus as in claim 25 wherein said flexible second wall includes a radial projection proximate said outward flare, said positioning member being disposed between said outward flare and said radial projection.

27. Apparatus as in claim 2 wherein said pipe is straight.
28. Apparatus as in claim 2 wherein said pipe comprises at least one bend.
29. Apparatus as in claim 2 wherein said pipe comprises at least two bends.
30. Apparatus as in claim 1 wherein said pipe comprises a flexible third wall defined by at least one overlapping profile disposed within said flexible second wall.
31. Apparatus as in claim 1 wherein said pipe comprises a third flexible wall defined by at least one elongated profile member wrapped about an outer surface of said first wall.
32. Apparatus as in claim 31 wherein said flexible second wall is disposed within said first wall.
33. Apparatus as in claim 1 wherein said flexible second wall is disposed on an outer surface of said first wall and further including a flexible third wall defined by at least one elongated profile member

having overlapping edges and being disposed on an outer surface of said flexible second wall.

34. Apparatus as in claim 1 whereins aid first rigid wall extends longitudinally beyond said flexible second wall.

35. Apparatus as in claim 1 wherein said flexible second wall extends beyond said first rigid wall.